AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1. (Currently Amended) A electrophotographic apparatus for reproducing a picture by expressing a gradation of the picture by use of halftone spots which are each formed by dot pictures within a plurality of pixels, said electrophotographic apparatus comprising:

a picture reproducing engine for forming the dot pictures by attaching toner to virtual dot areas each within the pixel; and

an image processing unit for causing (i) growth of halftone spots of a first group in a first data range of input image data to increase a gradation of the dot picture, and (ii) growth of halftone spots of a second group in a second data range of the input image data, which is adjacent to higher gradation level side of said first data range to further increase the gradation of the dot pictures;

~~wherein the gradation of the dot pictures is simply increased by said image processing unit without decrease at a boundary between said first and second data ranges.~~

wherein a density of the halftone spots of said second data range is larger than a density of the halftone spots of said first data range, and

wherein said image processing unit generates virtual dots small enough to fail to form dot pictures of toner in halftone spot areas other than said halftone spots of said first group in said first data range of the input image data.

2. - 5. (Cancelled)

6. (Currently Amended) An image processing method for reproducing a picture by expressing a gradation of the picture by use of halftone spots which are each formed

by dot pictures within a plurality of pixels, said image processing method comprising steps of:

growing halftone spots of a first group in a first data range of input image data to increase a gradation of the dot pictures;

growing halftone spots of a second group in a second data range of the input image data, which is adjacent to higher gradation level side of said fist data range to further increase the gradation of the dot pictures~~; and~~,

~~simply increasing the gradation of the dot pictures without decrease at a boundary between said first and second data ranges.~~

wherein a density of the halftone spots of said second data range is larger than a density of the halftone spots of said first data range; and

generating virtual dots small enough to fail to form dot pictures of toner in halftone spot areas other than said halftone spots of said first group in said first data range of the input image data.

7. - 15. (Cancelled)

16. (Original) An electrophotographic apparatus for reproducing a picture by expressing a gradation of the picture by use of halftone spots which are each formed by dot pictures within a plurality of pixels, said electrophotographic apparatus comprising:

a picture reproducing engine for forming the dot pictures by attaching toner to virtual dot areas each within the pixel; and

an image processing for causing (i) growth of halftone spots of a first group in a first data range of input image data to increase a gradation of the dot pictures, and (ii) growth of halftone spots of a second group in a second data range of the input image data, which is adjacent to higher gradation level side of said first data range to further increase the gradation of the dot pictures;

wherein said image processing unit generates virtual dots small enough to fail to form dot pictures of toner in halftone spot areas other than said halftone spots of said first group in said first data range of the input image data.

17. (Original) An electrophotographic apparatus for reproducing a picture by expressing a gradation of the picture by use of halftone spots which are each formed by dot pictures within a plurality of pixels, said electrophotographic apparatus comprising:

a picture reproducing engine for forming the dot pictures by attaching toner to virtual dot areas each within the pixel; and

an image processing unit for causing (i) growth of halftone spots of a first group in a first data range of input image data to increase a gradation of the dot pictures, and (ii) growth of halftone spots of a second group in a second data range of the input image data, which is adjacent to higher gradation level side of said first data range to further increase the gradation of the dot pictures;

wherein halftone spots of said second group start to grow during the growth of halftone sports of said first group in said first data range of the input image data.

18. (New) A electrophotographic apparatus for reproducing a picture by expressing a gradation of the picture by use of halftone spots which are each formed by dot pictures within a plurality of pixels, said electrophotographic apparatus comprising:

a picture reproducing engine for forming the dot pictures by attaching toner to virtual dot areas each within the pixel; and

an image processing unit for causing (i) growth of halftone spots of a first group in a first data range of input image data to increase a gradation of the dot picture, and (ii) growth of halftone spots of a second group in a second data range of the input image data, which is adjacent to higher gradation level side of said first data range to further increase the gradation of the dot pictures;

wherein a density of the halftone spots of said second data range is larger than a density of the halftone spots of said first data range, and

wherein halftone spots of said second group start to grow during the growth of halftone spots of said first group in said first data range of the input image data.

19. (New) An electrophotographic apparatus according to claim 18, wherein the growth of halftone spots of said first group stops during the growth of halftone spots of said second group.

20. (New) An image processing method for reproducing a picture by expressing a gradation of the picture by use of halftone spots which are each formed by dot pictures within a plurality of pixels, said image processing method comprising steps of :

growing halftone spots of a first group in a first data range of input image data to increase a gradation of the dot pictures; and

growing halftone spots of a second group in a second data range of the input image data, which is adjacent to higher gradation level side of said fist data range to further increase the gradation of the dot pictures,

wherein a density of the halftone spots of said second data range is larger than a density of the halftone spots of said first data range, and

wherein halftone spots of said second group start to grow during the growth of halftone spots of said first group in said first data range of the input image data.

21. (New) An image processing method according to claim 20, wherein the growth of halftone spots of said first group stops during the growth of halftone spots of said second group.

22. (New) An image processing apparatus according to claim 1, wherein the gradation of the dot pictures is simply increased by said image processing unit without decrease at a boundary between said first and second data ranges.

23. (New) An image processing apparatus according to claim 18, wherein the gradation of the dot pictures is simply increased by said image processing unit without decrease at a boundary between said first and second data ranges.

24. (New) An image processing method according to claim 6, wherein the gradation of the dot pictures is simply increased by said image processing unit without decrease at a boundary between said first and second data ranges.

25. (New) An image processing method according to claim 20, wherein the gradation of the dot pictures is simply increased by said image processing unit without decrease at a boundary between said first and second data ranges.